Fall 2014 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD0001	Overall LMA	Total LMA						
Reclamation District No. 0001 Union	Rating	Miles						
Island	U	1.14						
Rated Item		Maintena	nce Deficiancy		Enforc	ement	Design & Obsole	k System scence
Nateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	0.21		0.21	18.45%				
Encroachments	0.02		0.02	1.76%				
Animal Control	0.04		0.04	3.52%				
Slope Stability	0.01		0.01	0.88%				
Erosion / Bank Caving	0.01		0.01	0.88%				
Supplemental								
DWR Erosion Survey	0.01		0.01	0.88%				
LMA Totals:	0.30	0.00	0.30	26.36%	0.00	0.00	0.00	0.00

LMA District Cover Sheet

Fall 2014 Levee Inspection Results

Reclamation District No. 0001 Union Island

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			U	

* Overall LMA Rating (Fall Only)		U							
** Non-receipt	of Summer or Winter Inspe	ection Reports may effect	ct overall annual rating.						
* SPRING INSPECTIONS: Overall maintenance ratings are not of deficiencies are rated using the same			dual maintenance						
FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.									
Comments									

Unit Cover Sheet

Fall 2014 Levee Inspection Results

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles
Unit No. 01 Old River	Right	1.14

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	05/07/2014 - 05/07/2014		10/27/2014 - 10/27/2014	
DWR Inspector	Maksim Khashchuk		Maksim Khashchuk	
Accompanied By				

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	10/27/2014 10/27/2014	Maksim Khashchuk

LM Start		Rating **	Α	Issue No.		6		
LM End		Issue Type +	Ma	Location *		N/A		
Category Earthen Levee			GPS Latitude/Longitude					
Calegory				Start		End		
Item	Flood Pre	ood Preparedness & Training			0		0	
пеш					0		0	
DWR ID	DWR_RD0	001_01_s _ 201	13_6					
	Action/Comments							
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Inspector Comments: The LMA has current flood fighting training and an emergency plan.

LM Start		Rating **	Α	Issue No.		8	
LM End		Issue Type +	Ma	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item		y Supplies &			0		0
пеш	Equipmen	nt			0		0
DWR ID	DWR_RD0	001_01_s _ 201	13_8				
		Action/	Comme	nts			

Inspector Comments: The LMA has emergency supplies on-site.

LM Start		Rating **	Α	Issue No.		9			
LM End		Issue Type +	Ma	Location *		N/A			
Category	Earthen Levee			GPS La	atitud	le/Longitude			
Calegory				Start		End			
Item		Operations & Maintenance			٥		0		
item	Manuals				0		0		
DWR ID	DWR_RD0	001_01_s _ 201	13_9						
	Action/Comments								

Inspector Comments: The LMA has a copy of the O&M Manual available at the office.

No Photos

No Photos

No Photos

* Location LS: Land Side N/A: Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	10/27/2014 10/27/2014	Maksim Khashchuk

LM Start	0.00	Rating **	М	Issue No.		2	
LM End	0.00	Issue Type +	Ма	Location *	WS		
Category			GPS Lati	tud	e/Longitude		
Calegory			Start		End		
Item	DWR Ero	DWR Erosion Survey		37.822306	°	37.822306	0
пеш				-121.375304	°	-121.375304	0
DWR ID							

Inspector Comments: 07/02/2014: No significant change observed. 08/20/2013: No significant change at this site.

08/07/2012: The erosion is at the confluence of Old River and one of its tributary. [2014 Site ID:RD0001U01RM31.4]

Action/Comments



Close view of the erosion.

0.01	Rating **	A/W	Issue No.		1	
0.01	Issue Type +	En	Location *	* WS		
Category Earthen Levee				titud	le/Longitude	
				Start		
Encroachments		37.8224	° 80	37.822408	0	
				14 °	-121.375714	0
DWR ID DWR_RD0001_01_s _ 2012_1						
	0.01 Earthen L Encroachi	0.01 Issue Type + Earthen Levee Encroachments	0.01 Issue Type + En Earthen Levee Encroachments	0.01 Issue Type + En Location * Earthen Levee GPS La Start Start Encroachments 37.8224 -121.3757	0.01 Issue Type + En Location * Earthen Levee GPS Latitud Start Encroachments 37.822408 ° -121.375714 °	0.01 Issue Type + En Location * WS Earthen Levee GPS Latitude/Longitude Start End Encroachments 37.822408 ° 37.822408 -121.375714 ° -121.375714

Action/Comments

Pipe

Inspector Comments: Steel irrigation intake pipe up levee slope and through freeboard.

Photo 1 of 1: FA_2014_RD0001_23_1_20141001_00001.jpg
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11/14/2012

View of irrigation intake pipe on waterside slope.

LM Start	0.02	Rating **	М	Issue No.		18	
LM End	0.02	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS Latitude/Longitude			
Category	Category				Start		
Item	Animal Control			37.82251	1°	37.822511	0
пеш				-121.37585	7 °	-121.375857	0
DWR ID DWR_RD0001_01_s _ 2012_18							

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Several burrows present



View of the largest burrow on the landside levee shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	10/27/2014 10/27/2014	Maksim Khashchuk

LM Start	0.16	Rating **	N	Issue No. 12		12	
LM End	0.16	Issue Type +	Ма	Location *		WS	
Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Item Trim / Thin Trees				37.8213	76 °	37.821376 °	
				-121.3780	44 °	-121.378044 °	
DWR ID DWR_RD0001_01_s _ 2014_12							
Action/Comments							

Tree stumps.



View of the tree stump on the waterside levee slope.

LM Start	0.20	Rating **	М	Issue No.		5	
LM End	0.20	Issue Type +	Ma	Location *	LS		
Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Erosion / Bank Caving			37.8209	89 °	37.820989 °	
item			-121.3781	74 °	-121.378174 °		
DWR ID	DWR ID DWR_RD0001_01_s _ 2013_5						
Action/Comments							

Schedule repair of erosion site prior to the next inspection.

Photo 1 of 1 : FA_2014_RD0001_23_5_20141001_00004.jpg
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DS/07/2014

View of the erosion on the landside levee slope.

LM Start	0.23	Rating **	М	Issue No.		11	
LM End	0.23	Issue Type +	Ma	Location *	CR		
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Encroachments				62 °	37.820362 °	
пеш	item				59°	-121.378359 °	
DWR ID DWR_RD0001_01_s _ 2014_11							
Action/Comments							

Material

Inspector Comments: Stockpiled riprap on levee crown.



View of the riprap stockpiled on the levee crown.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	10/27/2014 10/27/2014	Maksim Khashchuk

LM Start	0.39	Rating **	A/W	Issue No.		7	
LM End	0.39	Issue Type +	En	Location *	WS		
Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Itom	Encroach	ments		37.8196	51 °	37.819651	
Item				-121.3804	67 °	-121.380467	
DWR ID DWR_RD0001_01_s _ 2012_7							
Action/Comments							

Pipe

Inspector Comments: Irrigation intake through levee crown.



View of the pipe through levee freeboard. Photo 1 of 1: FA_2014_RD0001_23_4_20141027_00018.jpg

LM Start	0.50	Rating **	М	Issue No.		4
LM End	0.50	Issue Type +	Ma	Location *		LS
Category	evee	GPS Latitude/Longitude				
Calegory				Start		End
Item	Slope Stability				14 °	37.818014 °
пеш			-121.3798	29 °	-121.379829 °	
DWR ID DWR_RD0001_01_f _ 2014_4						
Action/Comments						

Repair slope instability.





View of the scour from surface runoff on the landside levee slope.

LM Start	0.53	Rating **	М	Issue No.		14
LM End	0.53	Issue Type +	Ma	Location *	CR	
Cotogon/ Earthen Levee			GPS Latitude/Longitude			
Category			Start		End	
Encroachments			37.8176	51 °	37.817651 °	
пеш	Item			-121.3798	98 °	-121.379898 °
DWR ID DWR_RD0001_01_s _ 2014_14						
Action/Comments						
Material						

Material

Inspector Comments: Riprap stockpiled on levee crown.



View of the riprap stockpiled on the levee crown.

Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence N/A: Not Applicable LS : Land Side A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	10/27/2014 10/27/2014	Maksim Khashchuk

LM Start	0.66	Rating **	М	Issue No.	15		
LM End	0.66	Issue Type +	Ma	Location *	LS		
Catagony	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Animal Co	ontrol		37.8172	49 °	37.817249 °	
item				-121.3820	26 °	-121.382026 °	
DWR ID	DWR_RD0	001_01_s _ 201					
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Photo 1 of 1: FA_2014_RD0001_23_15_20141001_00011.jpg



Rodent holes on levee slope.

LM Start	0.67	Rating **	A/W	Issue No.		20	
LM End	0.67	Issue Type +	En	Location *	LS		
Catagory	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Encroach	Encroachments			34 °	37.817134 °	
item				-121.3820	99 °	-121.382099 °	
DWR ID	DWR_RD0	001_01_s _ 201					
Action/Comments							

Inspector Comments: Drainage discharge into Old River. No photo found from previous inspection. 04/26/2011 photo added.



04/26/2011 Discharge pipe in waterside slope.

LM Start	0.67	Rating **	С	Issue No.	Issue No.		
LM End	0.82	Issue Type + Ma		Location *		WS	
Category	Earthen L	evee		GPS Lat	itud	e/Longitude	
				Start		End	
Item	Vegetatio	n		37.81711	4 °	37.815070	0
item				-121.38220	3°	-121.382486	0
DWR ID	DWR_RD0	001_01_f _ 201	3_27				

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	10/27/2014 10/27/2014	Maksim Khashchuk

LM Start	0.86	Rating **	A/W	Issue No.	10			
LM End	0.86	Issue Type +	En	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory		Start		End				
Item	Encroach	ments		37.8145	66 °	37.814566 °		
				-121.382450 °		-121.382450 °		
DWR ID	DWR_RD0	001_01_s _ 201	12_10					
		Action/	Comme	nts				
Pipe								
Inspector Comments: Irrigation intake through levee freeboard.								

LM Start	0.86	Rating **	A/W	Issue No.	10 (cont)
LM End	0.86	Issue Type +	En	Location *	LS

Photo 1 of 2 : FA_2014_RD0001_23_10_20141001_00006.jpg

View of irrigation pipe on landside.

Photo 2 of 2: FA_2014_RD0001_23_10_20141001_00007.jpg



View of irrigation intake pipe on waterside.

Photo 1 of 1 : FA_2014_RD0001_23_25_20141027_00017.jpg

LM Start	0.93 Rating ** M Issue N			Issue No.		25
LM End	1.14	Issue Type +	Ma	Location *	LS	
Category	Earthen L	evee		GPS La	titud	le/Longitude
Calegory				Start		End
Item	Vegetatio	/egetation			13 °	37.811775 °
item			-121.3837	00 °	-121.384764 °	
DWR ID	DWR_RD0	3_25			·	
Action/Comments						

Remove the wild growth other than native grasses from the levee slopes.



View of the tall vegetation obstructing visibility on the landside levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0001 Union Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.14	10/27/2014 10/27/2014	Maksim Khashchuk

LM Start	1.09	Rating **	С	Issue No.	3			
LM End	1.09	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS Lat	tud	e/Longitude		
Calegory				Start		End		
Item	Slope Sta	bility		37.81202	1°	37.812021	0	
пеш				-121.38402	°	-121.384020	0	
DWR ID	DWR_RD0	001_01_s _ 201	3_3					
	Action/Comments							

No Photos

Repair the levee slope damaged by vehicle traffic and prevent access where possible.

LM Start	1.12	Rating **	М	Issue No.	26			
LM End	1.12	Issue Type +	Ма	Location *	LS			
Category	Earthen Levee			GPS Latitude/Longitude				
				Start		End		
Item	Animal Control			37.8118	96 °	37.811896 °		
				-121.3843	70 °	-121.384370 °		
DWR ID	DWR_RD0001_01_s _ 2014_26							
Action/Comments								

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

LM Start	1.14	Rating **	М	Issue No.	23			
LM End	1.14	Issue Type +	Ma	Location *	LS			
Category	Earthen Levee			GPS Latitude/Longitude				
				Start		End		
Item	Animal Control			37.81177	'5 °	37.811775	0	
				-121.38476	4 °	-121.384764	0	
DWR ID	DWR_RD0001_01_f _ 2013_23							
Action/Comments								

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Photo 1 of 1: FA_2014_RD0001_23_23_20141001_00015.jpg



View of the rodent burrow on the landside slope.

* Location LS : Land Side WS : Water Side

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement